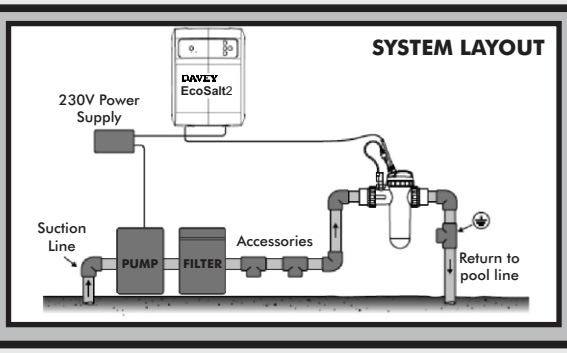
DAVEY

ECO
Salt Water Chlorinators

EcoSalt 2

Ecomatic COMM



Saltwater chlorination is the best solution to ensure a sparkling clean swimming pool. Benefits offered include:-

- Improved water quality! Due to consistent chlorine dosage and lack of residue, water quality is much better than that achieved by using conventional dry chlorine compounds.
- Simple Operation! Once installed and water is salinated, simply switch on and forget about pool chlorination.
- Free Chlorine! No more chlorine bills, the unit will pay for itself in about two years.
- Improved swimming pleasure! Saltwater chlorinated water puts an end to sore, red eyes and smelly, itchy skin.

Davey Chlorinators are of exceptional design combining high flow, long life electrodes with a robust switch mode power supply to provide many years of trouble free operation. All models feature multilingual and user friendly LCD interface with data logging capability, adjustable reverse polarity self-cleaning cells, auto-turn off on low salt, low flow and overload indication. Two types are available:-

Eco Salt 2- Economic, simple and compact units for smaller pools featuring inline reverse polarity cell to minimize maintenance and installation flexibility with cell plug to eliminate need for bypass. It also comes with an integrated flowswitch with min flow of 3.6m^3/hr making it suitable for variable speed pumps. Operating salt level; 3-6g/l.

Ecomatic COMM - For big residential and light commercial applications, the specification includes a heavy duty control unit and a high flow rate reverse polarity cell. It features logging for cell run and power supply time, low salt and low flow as well as cell failure. It has software controlled DC current to the cell for enhanced chlorine production. Suitable for 3-36g/l of salt level (sea water). This model also features MODBUS interface for remote monitoring of temperature, conductivity and run times. An optional WiFi and 4G connections are also available.

Combining the benefits of the saltwater chlorination process with outstanding design, ease of operation and exceptional reliability a Davey Chlorinator is simply the best chlorinator available. Once installed no pool owner will ever be without one again!

SALT WATER CHLORINATION

The most common source of chlorine is common salt or sodium chloride. When dissolved in water the sodium and chlorine ions separate to form free sodium and chlorine. If an electric charge is passed through the solution in a process called electrolysis chlorine gas forms at the anode and hydrogen gas at the cathode, free chlorine gas being recovered in the process.

Salt water chlorination uses this simple process, the pool water being passed through an electrolysis cell where chlorine gas is produced. Due to the very low quantities it is totally safe and very effective as the gas being produced is of 100% concentration. The electrolysis process also has the benefit of producing small quantities of ozone as a by-product which improves the sanitizing effect. In order for the process to occur salt is dissolved in the pool and thereafter there is constant production of chlorine whenever the pool pump is working. It really couldn't be simpler!

CHLORINATOR OPERATION

Davey Chlorinators include two components, the control unit and the electrolysis cell. The control unit is wall mounted close to the filter and provides DC power to the electrolysis cell. The pump is connected through the control unit so chlorine production only occurs when the pump is operating, the standard sizing basis being dosage levels of 1.5gms/m of pool volume every 24hours.

The electrolysis cell is mounted in-line with the pool circulation piping after the pool filter. It has no moving parts, but does scale up with use, the self-cleaning process removing this scale by reversing the electrical polarity. Periodically the cells should also be manually cleaned.

Salt is added at the pool at a concentration of about 4,000ppm, a typical 100m^3 pool requiring about 400kgs. After the initial dose concentration levels need to be periodically topped up, though top up levels are small, usually in amounts of 50kgs. When operating a Chlorinator it is very important that pH is regularly monitored and controlled and also if the water becomes exceptionally dirty additional manual chlorination may be necessary to temporarily boost chlorine levels.

EQUIPMENT DATA

Model	Power (W)	Chlorine Production (g/hr)	Pool Volume (8hr operation), m^3		Controller Dimensions (mm)			Cell Housing Dimensions (mm)				Weight (Kg)
			High Usage	Low Usage	Height	Width	Depth	Height	Width	Depth	Inlet/ Outlet	
EcoSalt DES2-15E	120	15	75	50	320	238	113	341	198	120	50	10
EcoSalt DES2-25E	240	25	125	80								
EcoSalt DES2-35E		35	175	110								
Ecomatic COMM 500	250	50	250	150	400	300	150	206	415	127	90	16
Ecomatic COMM 1000	500	100	500	300								17

NOTE:

1. Recommended pool volumes are based upon 1.5ppm chlorine dosage in eight hours of pump operation. Dosage should be increased by +50% for pools with heavy bathing loads or in hot climates and a larger chlorinator specified accordingly
2. In 'hard water' applications (above 275ppm), reverse polarity systems will require regular (monthly) inspection and manual cleaning.
3. For Commercial, use 2.5ppm due to higher bath load and extended use